

CLAIMS

1. A system of articulation comprising at least one pivot point between one end of a first rigid element (7) and one end of a second rigid element (8), said ends having bearing surfaces fit for pairing up respectively one on top of the other, elastic means being provided to maintain the bearing contact between said faces, characterized in that said system comprises at least one intangible pivot point (P1, P2) movable in two orthogonal planes within the limits permitted it by guide means (6), and means (19a-c) which allow pivoting only in one or some planes, the number and orientation of which are defined.

2. A system of articulation according to claim 1, characterized in that it comprises two such intangible pivot points (P1, P2), located within two distinct and substantially orthogonal planes.

3. A system of articulation according to claim 1 or 2, characterized in that it comprises two pivots parts (1, 2) each having a recessed zone limited by an at least partially curved surface (6), each of said pivot parts depending respectively on one of said rigid elements, said pivot parts being substantially orthogonal to each other, and engaged one in the other through interlocking of their respective recessed zone, such as to be able to pivot relative to each other in the manner of the links of a chain.

4. The system of articulation as claimed in claim 3, characterized in that said pivot parts take the form of a ring (2), a loop, a hook (1) or a polygonal plate (3), having a recess (5) limited by an at least partially curved surface (6).

5. The system of articulation as claimed in claim 3 or 4, characterized in that the at least partially curved surface (6) limiting the recessed zone of each of the pivot parts is circular.

6. The system of articulation as claimed in any one of claims 3 to 5, characterized in that one at least of the ends of said rigid elements (7, 8) incorporates a receptacle (9, 23), open on the articulation side and provided with a tie rod (14, 28), one end (16, 30) of which is held captive in said receptacle and the other end (1, 2) of which constitutes one of said pivot parts, said elastic means (18, 31) cooperating with said tie rod in order to force the bearing faces (33, 36; 34, 36; 35, 36) of said rigid elements to remain in contact one with the other.

7. The system of articulation as claimed in any one of claims 3 to 6, characterized in that one at least of the ends of said rigid elements (1, 2) incorporates a receptacle, open on the articulation side, and the wall of said receptacle has at least one axial notch (19a, 19b), the geometry and size of which allow a pivot part portion (32) to penetrate into said notch from the open end of said receptacle.

8. The system of articulation as claimed in any one of claims 3 to 7, characterized in that an anti-rotation relief (32) is provided on one of the pivot parts.

9. The system of articulation as claimed in claim 8, characterized in that said anti-rotation relief (32) constitutes the pivot part portion capable of penetrating into the notch(es).

10. The system of articulation as claimed in any one of claims 7 to 9, characterized in that said wall has access ramps (41) to said notch from the outside of the rigid element.

11. The system of articulation as claimed in any one of claims 7 to 10, characterized in that, on the outer face of said wall and opposite the open end of the receptacle, said notch opens out into a concave (or convex) surface of revolution (44), and in that the end of the other rigid element comprises a convex (or concave) surface of revolution (43) of complementary size and shape.

12. The system of articulation as claimed in any one of claims 1 to 11, characterized in that said bearing faces have at least one pair of complementary reliefs suitable for engaging in a selected relative angular position of the two rigid elements (7, 8).

13. The system of articulation as claimed in any one of claims 1 to 12, characterized in that said rigid elements (7, 8) are respectively a spectacle side-piece and a spectacle face.

14. The system of articulation as claimed in any one of claims 1 to 12, characterized in that one at least of the elements (70) comprises, at its end opposite to the articulation (A), a joining means (71) capable of engaging temporarily with a complementary joining means (81') provided on another element (80').

15. The system of articulation as claimed in any one of claims 1 to 12 and 14, characterized in that said rigid elements belong to an articulated train for use in robotics.